



# General VRLA Battery

## 6FM220G (12V220Ah)

The LONGWAY General Series middle batteries ( more than 24Ah) are designed and developed using AGM technology and valve controlled sealing technology. They can meet conventional performance requirements, with a designed float charging life of over 8 years. The valve controlled non-spillable structure design allows safe use in any direction and is certified by sea and air freight. The battery performance also meets international standards. such as IEC60896-2012, UL1989.etc.



### General Feature

- High reliability, safe without leakage, can be used in any position
- Excellent recovery performance after deep discharge
- Environmentally friendly products.  
Meet EU battery directive RoHS and REACH standards
- Maintenance free
- Widely applicable temperature range, can be used at -20°C~60°C
- Low self-discharge rate. The average monthly self-discharge rate of the battery is less than 2.5%  
(It is recommended to recharge after storage for 6 months or before use)

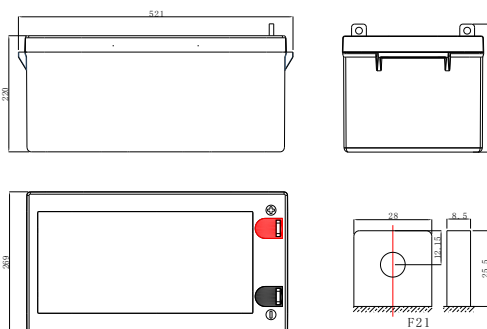
### Applications

- Emergency lights; Alarm system
- Electrical test equipment; communication Equipment
- Uninterruptible power supply; Fire & Security
- Electric toys; Control instruments
- Portable Movie & Video lights
- Electric tools; Solar system
- Robots and control machines and other

### Performance

Nominal Voltage	12V (6cells)
Capacity	@25°C
10hr Rate (22.0A)	220 Ah @ to 1.75V/cell
5hr Rate (42.5A)	191 Ah @ to 1.70V/cell
3hr Rate (55.0 A)	165 Ah @ to 1.60V/cell
Weight	Approx (67.5±3%)kg ( 148.8lbs )
Internal Resistance	Approx 3.30mΩ fully charged @25°C
Maximum Discharge Current	400A(3sec)
Terminal	F21
Operating Temperature Range	Discharge:-20°C~60°C; Charge:0°C~50°C Storage:-20°C~40°C
Container Material	ABS(UL94 HB)/UL94-V0 Optional

### Dimensions



Length	521mm	20.5inch
Width	269mm	10.6inch
Height	220mm	8.66inch
Total height	246mm	9.69inch

### Battery use

#### Cycle use

1. Limit the initial charging current to no more than 55A
2. Keep charging voltage at 14.4-15.0V/unit.and continue charging at least 3 hours after the charging current reduces to4.4A to ensure full charge
3. The compensation coefficient of charging voltage and temperature is -5mv/cell/°C

#### Float use

1. Limit the initial charging current to no more than 55A
2. Keep charging voltage at 13.5-13.8V/unit.When the voltage reaches the constant voltage,the current gradually decreases until the battery is fully charged and continues to charge
3. The compensation coefficient of charging voltage and temperature is -3mv/cell/°C



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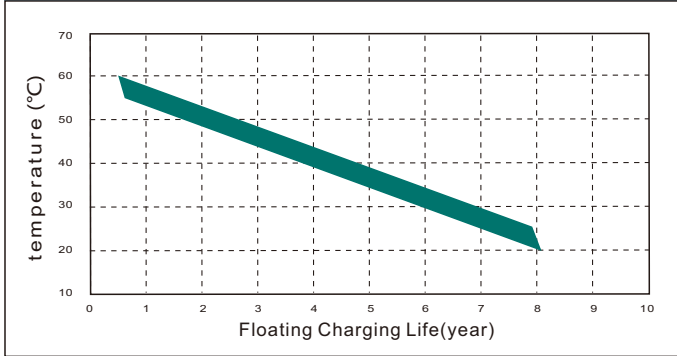
Note: This information usually describes use only and is not intended to make any warranties or promises regarding the battery. Battery specifications and battery design are subject to change without prior notice. Please contact LONGWAY Battery for the latest information.



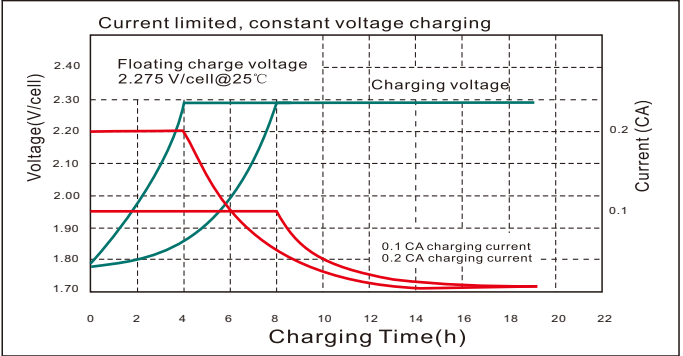
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### Floating Charging Life VS Temperature



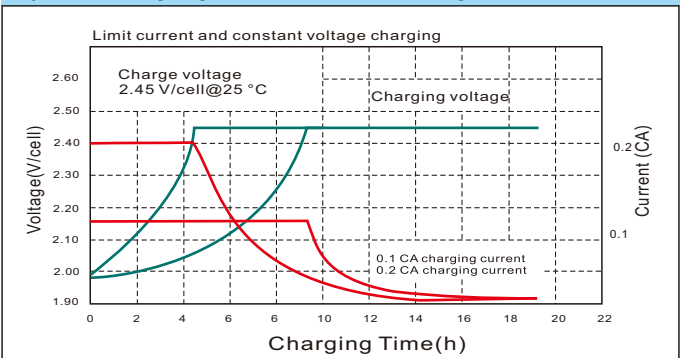
### Floating Charging Characteristics Diagram



### Cycle Life



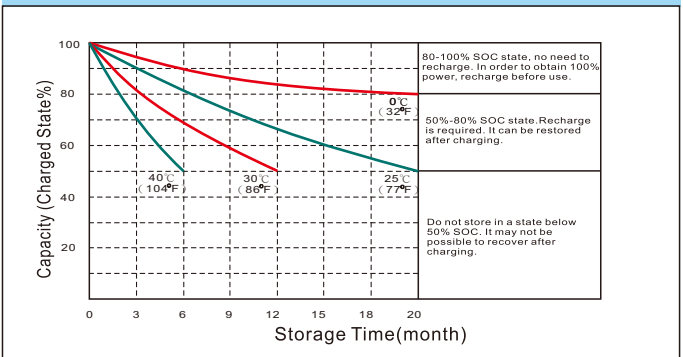
### Cycle charging characteristic diagram



### Temperature and capacity characteristics



### Self-discharge characteristic



### Constant current characteristics(A,25°C )

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.6	594	506	385	227	123	75.9	55.8	38.4	25.7	22.3	11.5
9.9	576	491	377	222	121	75.5	55.6	38.2	25.6	22.2	11.4
10.2	564	481	370	218	118	74.8	55.0	37.8	25.5	22.1	11.4
10.5	532	466	358	211	115	74.1	54.5	37.5	25.4	22.1	11.4
10.8	487	452	351	207	112	73.3	53.9	37.1	25.3	22.0	11.3

### Constant power discharge characteristic ( W,25°C )

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.6	6415	5526	4389	2542	1404	879.2	656.5	454.0	308.2	266.6	138.0
9.9	6223	5360	4143	2492	1376	874.8	653.3	451.7	306.6	265.3	137.3
10.2	6094	5249	4058	2441	1348	866.2	646.8	447.3	305.4	264.3	136.8
10.5	5742	5083	3931	2364	1306	857.5	640.3	442.8	304.5	263.5	136.4
10.8	5260	4934	3855	2319	1281	848.9	633.9	438.3	303.6	262.7	136.0



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